malignant ovarian tumors including the Stein-Leventhal syndrome, the various dysontogenic tumors, such as Krukenberg, Brenner, dysgerminomas, feminizing and masculinizing tumors and the adrenal types as well as the various teratomatous, is of real help in understanding the vagaries encountered with these tumors. A sensible discussion of classifying ovarian tumors is well worth reading.

A. E. L. Nesbit has revised the chapter on fertilization and placentation with special attention to chorionic aberrations encompassing abortion, mole formation and choriocarcinoma. John K. Frost has considerably enlarged the chapter on the cytopathology of the vagina and uterus. His detailed descriptions of the various cell changes encountered are most valuable and make for a ready understanding of this complicated subject.

All in all, your reviewer feels certain that his old friend Emil Novak would have been happy with the changes presented in the Fifth Edition of his classical contribution to the knowledge of the pathology of obstetrical and gynecologic conditions.

W. B. Saunders Company, Publishers, presents Novak's Pathology in the best tradition of their company.

LUDWIG A. EMGE, M.D.

* * *

MEDICAL PHYSICS—Volume III—Editor, Otto Glasser, Ph.D., Diplomate in Radiological Physics, American Board of Radiology; Professor of Biophysics, Frank E. Bunts Educational Institute; Head, Department of Biophysics, Cleveland Clinic Foundation; Member, Council on Medical Physics, American Medical Association. The Year Book Publishers, Inc., 200 E. Illinois St., Chicago 11, 1960. 734 pages, $25.00.

This is a big book (nearly 5 pounds)—nothing to read in bed; but you'll use it for reference while sitting at a table. The typography is excellent, with text in 8-point and references in 6-point. The line cuts were mostly made under the editor's direction and are not so much reduced as to make the labels hard to read.

In his modest preface, Glasser calls this a complement and supplement to Volumes I and II, published in 1944 and 1950, respectively. It is a tribute not only to Glasser's scholarship, energy and courage, but also to the modern physician's growing interest in physical science. For some subjects he has obtained new authors; for others he merely refers the reader to Vol. I or II, or has had the original author bring it up to date.

Among the 180 contributors one finds many familiar names. All are American (one Canadian). The town and institution are given for each, to give some inkling of authority. This might be an invitation to the reader to quarrel with the author or to query him further.

The serial Table of Contents lists the essays, omitting those entered by title only. There are 177 of them. Manv essays have more than one author, and, conversely several authors have contributed more than one essay.

A most useful feature is a Classified Table of Contents with 47 broad headings covering lists from four lines to four pages in length. I'd think this a boon to browsers. My own inclination, however, is to leaf through the text and let my eye pick up an intriguing title or line cut.

Three pages of Normal Clinical Values cover blood (cytology and chemistry), urine and renal and hepatic function, C.S. fluid, feces, etc. Curiously the title Pulmonary is skipped, here, in text and even in index. But one finds plenty under the title Respiratory System, well indexed also under heading Lungs. There, under External Respiration one finds normal values of vital capacity, etc. and a broad and deep discussion of energetics, gas exchange and O_2 transport, with all the mathematical models. Methods of gas analysis etc. are also under this title (special sub-head) and so is Hay Fever; Chemistry of Pollens.

Then one comes to Resuscitation, covering both respiratory and cardiac-failure. Mouth to mouth artificial respiration is described and illustrated and so is cardiac massage through open chest. Closed chest massage was developed too recently to get into the essay. "The simpler procedures of stimulating the myocardium by pounding on the chest... can be tried . . . as long as not too much time is consumed." Defibrillation by electric shock and by potassium and calcium salts (also procaine) is described and the artificial pacemaker is mentioned.

Radiation has many subheadings, including gamma spectrometry; protection and health physics, including waste disposal, radiation therapy and biologic effects, radiation sickness and even aging. Chemical effects is one of the many subheadings under Roentgen Rays. For X-ray generators one is referred to Vol. II, but Trump has two pages for the Van de Graaf. Subheading Tubes, advances in design are briefly told for rotating anode, beryllium window, betatron and linear accelerator. This is followed by three pages on low inherent filtration and then four pages on rotating anode.

Under Sensory Devices is a remarkable essay on the frequency spectrum of electrocardiogram and electroencephalogram obtained by speeding up a tape recording and putting the multiplied frequencies through a sound spectrograph.

Space Medicine gets a concentrated treatment in five pages not omitting algae to produce food and regenerate O_2. Ultrasonics and its use for producing lesions in the central nervous system are treated extensively, yet the two essays are preceded by one on vibratory energy in human tissue under Tissues: body.

The general discussion under Biology: Application of Control System Theory gets seven pages, while under Vision: Servo analysis of Pupil Reflex to Light is an archive article of sixteen pages (very interesting).

Such overlaps and jumpy organization are inevitable, of course, in a book written by many authors. An intelligent use of the index and classified table of contents will easily overcome this fault.

Every time I open the book to look something up, my eye lights on something I didn't know—example: Counter current heat exchange to keep testicle cool. Bioelectric potentials produced by growing tissues. Effects of magnetic fields on growth. These appear to be real, not quackery. The once notorious Gurwitz rays are not in the index, although they are discussed in Vol. I under Mitrogenic Radiation.

I note half a column under Anesthesia: Xenon, in addition to its mention under Narcotic Action of Air, but its obliteration of the effect of anoxia on biologic effect of radiation is not mentioned.

As in Volumes I and II, there is lots of help in this book for the investigator momentarily out of his field, and lots of intellectual entertainment for the dilettante.

R. R. NEWELL, M.D.

* * *

DRUGS OF CHOICE—1962-1963—Walter Modell, M.D., Editor; Director, Clinical Pharmacology, and Associate Professor of Pharmacology, Cornell University Medical College, New York, N. Y.; Attending Physician, Veterans Administration Hospital, Montrose, N. Y. The C. V. Mosby Company, St. Louis, Mo., 1962. 941 pages, $14.50.

This book is edited by the editor of *Clinical Pharmacology and Therapeutics* who had excellent training in basic pharmacology under Prof. McKeen Cattell at Cornell University Medical Center and who has devoted his more recent years to clinical pharmacology, internal medicine and medical writing. Each chapter is written by a specialist, skilled not only in clinical practice but also in clinical or laboratory research. For example, Chapter 6 on "Drugs for Nutri-